

VERSION WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS

3. (Three Times Amended) An image pickup device comprising:

a color filter array comprising color filters arranged in horizontal and vertical directions;

a plurality of pixels including photoelectric converting elements arranged in the horizontal and vertical directions, respectively corresponding to the color filters;

a plurality of vertical read-out units provided for a plurality of pixels arranged in the vertical direction, said plurality of vertical read-out units being arranged to read out signals from the plurality of pixels arranged in the vertical direction;

a horizontal read-out unit arranged to read out sequentially the signals from said plurality of vertical read-out units in the horizontal direction;

an output unit arranged to output sequentially the signals from said horizontal read-out unit; and

a control unit arranged to divide the plurality of pixels on a unit basis of a predetermined number of lines, which includes a plurality of first lines [and] alternating with a plurality of second lines, and arranged to add the signals of pixels of [the plurality of] adjacent first lines and [the signals of pixels of the plurality of] second lines to generate [different kinds of color difference signals corresponding respectively to different groups of a predetermined number of lines so as to generate one kind of] a color difference signal from every [predetermined number of lines] unit, wherein the color difference signals generated from adjacent units are different, and the color difference signals generated from every other unit are equal.

7. (Twice Amended) An image pickup device according to claim 5, wherein the added signal charges of the two predetermined pixels are further added with signal charges of two predetermined pixels that are present in a direction diagonal to the first-mentioned two predetermined pixels in a column adjacent to that of the first-mentioned two predetermined pixels, and
an image signal corresponding to the added signal charges of the four predetermined pixels is outputted from said output unit.

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